

REMARKS

In the outstanding Office Action, claims 1-20 were presented for examination. Applicants have amended claims 1, 4, 5, 7-11, 14, and 17-20 herein. Applicants respectfully request reconsideration of the claims in view of the foregoing amendments and the following remarks.

Applicants have amended the claims to more succinctly claim particular aspects of the invention. Support for the amendments is found in the specification and the original claims. Accordingly, applicants submit that no new matter has been introduced by the amendments.

Claims 1, 2, 6, 9, 12, 14, 15 and 19 were rejected under 35 U.S.C. § 102(b) based on Suzuki et al. (U.S. Patent No. 4,878,499).

Referring to independent claim 1, as amended, the claim recites in part:
"a plastic cord that is configured to be placed across a chest of a person, the plastic cord being substantially transparent to x-rays; and, a sensor coupled to the plastic cord generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person."

Referring to Suzuki et al., the reference is directed to a magnetic resonance imaging system. Suzuki et al. further recites "Respiration detector 10 comprises a belt-like air bag wound around the thorax of patient P and a pressure detector coupled to the air bag, and detects respiration of patient P (whether patient P takes a breath or stops it)." See column 4, lines 53-57. Suzuki et al. does not provide any teaching of a plastic cord that is configured to be placed across a chest of a person, the plastic cord being substantially transparent to X-rays, as recited in claim 1. In contrast, Suzuki et al. utilizes an air bag to detect respiration. Further, Suzuki et al. does not provide any teaching of a sensor coupled to a plastic cord generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person, as recited in claim 1.

Accordingly, because the Suzuki et al. does not teach each and every limitation of independent claim 1, and claim 6 which depends from claim 1, applicants submit that claims 1 and 6 are allowable over Suzuki et al.

Referring to independent claim 9, as amended, the claim recites in part:
"disposing a plastic cord across a chest of the person, the plastic cord being substantially transparent to x-rays; and, generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person utilizing a sensor coupled to the plastic cord."

Referring to Suzuki et al., the reference does not provide any teaching of disposing a plastic cord across a chest of the person, the plastic cord being substantially transparent to x-rays, as recited in claim 9, as amended. Further, the reference does not provide any teaching of generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person utilizing a sensor coupled to the plastic cord, as recited in claim 9.

Accordingly, because the Suzuki et al. does not teach each and every limitation of independent claim 9, and claim 12 which depends from claim 9, applicants submit that claims 9 and 12 are allowable over Suzuki et al.

Referring to independent claim 14, as amended, the claim recites in part:
a plastic cord that is configured to be placed across a chest of a person lying on the tabletop, the plastic cord being substantially transparent to x-rays; and, a sensor operatively coupled to the plastic cord generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person, the sensor being outside a scanning area of the X-ray device."

Referring to Suzuki et al., the reference does not provide any teaching of a plastic cord that is configured to be placed across a chest of a person lying on the tabletop, the plastic cord being substantially transparent to x-rays, as recited in claim 14, as amended. Further, the reference does not provide any teaching of a sensor operatively coupled to the plastic cord

generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person, the sensor being outside a scanning area of the X-ray device, as recited in claim 14.

Accordingly, because the Suzuki et al. does not teach each and every limitation of independent claim 14, and claims 15 and 19 which depend from claim 14, applicants submit that claims 14, 15, and 19 are allowable over Suzuki et al.

Claims 3-5, 7, 8, 10, 11, 13, 16-18, and 20 were rejected under 35 U.S.C. § 103(a) based on Suzuki et al. and Watson et al. (U.S. Patent No. 4,308,872).

Referring to Watson, the reference is directed to an apparatus for monitoring respiration. The apparatus utilizes an electrically conductive loop that is constructed from gauge stranded copper. See column 3, lines 24-32 and column 4, lines 62-65. Applicants note that the conductive copper loop of Watson et al. would generate undesirable image artifacts on X-ray images of a patient generated by the system of Suzuki et al. Accordingly, the combination of the teachings of Suzuki et al. and Watson et al. would impair and/or destroy the functionality of Suzuki et al. by generating undesirable image artifacts in X-ray images of a patient. Accordingly, applicants respectfully submit that no proper motivation has been identified for the combination of Suzuki et al. and Watson et al.

Accordingly, because no proper motivation has been provided for the combination of Suzuki et al. and Watson et al., applicants submit that claims 3-5, 7, 8, 10, 11, 13, 16-18, and 20 are allowable over these references.

Claims 3-5 and 7-8 depend from independent claim 1 and include all of the limitations of claim 1. As discussed above, Suzuki et al. does not provide any teaching of: "a plastic cord that is configured to be placed across a chest of a person, the plastic cord being substantially transparent to x-rays; and, a sensor coupled to the plastic cord generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person."

Referring to Watson et al., the reference utilizes an electrically conductive loop that is constructed from gauge stranded copper for monitoring respiration. See column 3, lines 24-32

and column 4, lines 62-65. Watson et al., however, does not provide any teaching of a plastic cord that is configured to be placed across a chest of a person, the plastic cord being substantially transparent to x-rays, as recited in claim 1 as amended. In contrast, Watson et al. utilizes the electrically conductive loop constructed from copper that would not be substantially transparent to x-rays. Further, Watson et al. does not provide any teaching of a sensor coupled to the plastic cord generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person, as recited in claim 1.

Accordingly, because the combination of Suzuki et al. and Watson et al. does not teach each and every limitation of independent claim 1, and claims 3-5 and 7-9 which depend from claim 1, applicants submit that claims 3-5, and 7-9 are allowable over these references.

Claims 10, 11 and 13 depend from independent claim 9 and include all of the limitations of claim 9. As discussed above, Suzuki et al. does not provide any teaching of: "disposing a plastic cord across a chest of the person, the plastic cord being substantially transparent to x-rays; and, generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person utilizing a sensor coupled to the plastic cord", as recited in claim 9.

Referring to Watson et al., the references does not provide any teaching of: "disposing a plastic cord across a chest of the person, the plastic cord being substantially transparent to x-rays; and, generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person utilizing a sensor coupled to the plastic cord", as recited in claim 9.

Accordingly, because the combination of Suzuki et al. and Watson et al. does not teach each and every limitation of independent claim 9, and claims 10, 11 and 13 which depend from claim 9, applicants submit that claims 10, 11 and 13 are allowable over these references.

Claims 16-18, and 20 depend from independent claim 14 and include all of the limitations of claim 14. As discussed above, Suzuki et al. does not provide any teaching of: "a plastic cord that is configured to be placed across a chest of a person lying on the tabletop, the plastic cord being substantially transparent to x-rays; and, a sensor operatively coupled to the

plastic cord generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person, the sensor being outside a scanning area of the X-ray device", as recited in claim 14.

Referring to Watson et al., the reference does not provide any teaching of: "a plastic cord that is configured to be placed across a chest of a person lying on the tabletop, the plastic cord being substantially transparent to x-rays; and, a sensor operatively coupled to the plastic cord generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person, the sensor being outside a scanning area of the X-ray device", as recited in claim 14.

Accordingly, because the combination of Suzuki et al. and Watson et al. does not teach each and every limitation of independent claim 14, and claims 16-18, and 20 which depend from claim 14, applicants submit that claims 16-18, and 20 are allowable over these references.

Claims 7, 8, and 20 were rejected under 35 U.S.C. § 103(a) based on Suzuki et al. and Applicants supposed admitted prior art. Applicants respectfully disagree with the Examiner characterization of the specification and assert that the Examiner has misconstrued the teachings of the specification. Applicants note that the specification did indicate that the x-ray device 12 and a pulley are "conventional." However, Applicants note that no where in application 10/707775 did the application recite or infer that: "a system that has a tabletop having a securing device and a pulley coupled thereto, wherein a first portion of the strapping device extends between securing device and the pulley, the securing device and the pulley being positioned on the tabletop to allow the chest of the person to be disposed between the securing device and the pulley, and wherein a second portion of the strapping device extends from the pulley to the sensor are conventional in the art...", as asserted by the Examiner. Accordingly, applicants submit that the Examiner's foregoing assertion is simply incorrect and unsupported.

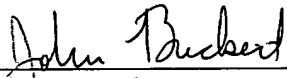
As discussed above, Suzuki et al. does not teach each and every limitation of independent claims 1 and 14, and claims 7, 8, and 20 which depend from at least one of claims 1 and 14. Accordingly, because Suzuki et al. does not teach each and every limitation of

independent claims 1 and 14, and claims 7, 8, and 20 which depend from at least one of claims 1 and 14, applicants submit that claims 7, 8, and 20 are allowable over Suzuki et al.

In view of the foregoing amendments and remarks, applicants respectfully submit that the instant application is in condition for allowance. Such action is most earnestly solicited. If for any reason the Examiner feels that consultation with applicants' attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below for an interview.

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 07-0845.

Respectfully Submitted,
CANTOR COLBURN LLP

By 
John F. Buckert
Registration No. 44,572

Date: January 31, 2006
Cantor Colburn, LLP
248-524-2300 ext. 3109
248-524-2700 (fax)